

Rhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 48.

January, 1946.

No. 565.

SOME MOSSES FROM WINDSOR, NOVA SCOTIA

HERBERT HABEEB

THE following is a list of noteworthy mosses gathered in the immediate vicinity of Windsor, N. S. The writer collected 250 numbers of moss comprising 100 species. The collections were made in the spring of 1942.

In company with Prof. J. S. Erskine, many an afternoon free from duties was spent roaming the fields and woods neighboring on King's Collegiate School at Windsor, N. S. Prof. Erskine devoted himself to observing birds and flowering plants, while the writer took on the mosses.

The first noteworthy collector of Nova Scotia mosses was A. Menzies, who collected the type of *Dicranum fulvum* Hook. near Halifax; others were J. Fowler, A. H. MacKay, J. Macoun and G. E. Nichols. Of present day writers, E. B. Bartram¹ has published an article on Nova Scotia mosses; while Margaret S. Brown² has put out quite a complete list of Nova Scotia bryophytes.

Of the mosses here listed many are new to Nova Scotia, and some may be said to be coastal plain elements. The nomenclature used in this article is according to Grout.³ The writer is grateful to Dr. A. J. Grout for the helping hand often lent in the determination of critical specimens.

AULACOMNIUM PALUSTRE (Web. & Mohr) Schwaegr. var. IMBRICATUM Bry. Eur. On ground, and humus.

¹ Bartram, E. B. Some Nova Scotia Mosses. RHODORA, 24: 121-124. 1922.

² Brown, M. S. Liverworts and Mosses of Nova Scotia. Proc. N. S. Inst. of Sc. 19: 161-198. 1936.

³ Grout, A. J. List of Mosses of North America North of Mexico. The Bryologist, 43: 117-131. 1940.

Plants referable to this variety are not uncommon in the Acadian region, as the writer has also a number of specimens from New Brunswick. Yet, it should be noted that some plants seem to possess leaves of both the variety and species.

DICRANUM SCOPARIUM Hedw. var. *ORTHOPHYLLUM* Brid. On ground. This is the form with the straight, strict leaves.

DICRANUM FUSCESCENS Turn. Common on ground in the woods.

DITRICHUM PALLIDUM (Hedw.) Hampe. Two collections from Windsor, off the ground.

PLEURIDIUM SUBULATUM (Hedw.) Lindb. On rather sterile ground. This moss was determined by Dr. Grout.

GRIMMIA ALPICOLA Hedw. On rocks, and boulders.

The writer has a suspicion that *Grimmia alpicola* is nothing more than a short-capsuled, muticous-leaved form of *Grimmia apocarpa* Hedw.

AMBLYSTEGIUM JURATZKANUM Schimp. On a rock.

BRACHYTHECIUM ACUTUM (Mitt.) Sull. On ground, and rotten wood.

BRACHYTHECIUM BESTII Grout. On ground in woods.

This moss is rather common in the Acadian region.

BRACHYTHECIUM CAMPESTRE Bry. Eur. On ground.

BRACHYTHECIUM FLEXICAULE Ren. & Card. On partly burnt wood, and ground.

BRACHYTHECIUM POPULEUM (Hedw.) Bry. Eur. On rocks, ground.

In both Nova Scotia and New Brunswick, *Brachythecium populeum* breaks down into two forms. One form is typical with a percurrent costa in the leaves, while the other has a costa extending $\frac{2}{3}$ the length of the leaf.

BRACHYTHECIUM VELUTINUM (Hedw.) Bry. Eur. On ground, debris, and lower trunk of a tree.

BRYHНИЯ HULTENII Bartr. Was mixed with *Brachythecium rivulare* on debris in a damp situation. The determination was made by Dr. Grout, who mentions it as one of only a few collections.

AMBLYSTEGIUM VARIUM (Hedw.) Lindb. var. *OVATUM* Grout. Concerning this specimen Dr. Grout wrote "costa even shorter than in type".

DREPANOCCLADUS ADUNCUS (Hedw.) Warnst. var. *KNEIFFI* (Bry. Eur.) Warnst. Two collections were made from the water

of a swamp. The one of May, 1942, is a large form. The other of April, 1942, is a small form.

DREPANOCLADUS ADUNCUS var. CAPILLIFOLIUS (Warnst.) Wynne. In water of a swamp.

EURHYNCHIUM HIANS (Hedw.) J. & S. A half dozen numbers collected from the ground, rotten log in a swamp, wood debris, etc.

A variable moss; a couple of specimens seem to approach the European *Eurhynchium Swartzii* (Turn.) Hobk. in leaf outline.

EURHYNCHIUM STRIGOSUM (Hoffm.) Bry. Eur. var. ROBUSTUM Röll. On ground.

HYGROAMBLYSTEGIUM IRRIGUUM (Wils.) Loeske. Not uncommon on debris in damp situations and alongside of brooks.

HYLOCOMIUM BREVIROSTRE (Beauv.) Bry. Eur. On rocks, brookside, and swampy ground.

HYPNUM CURVIFOLIUM Hedw. One collection made in April from the ground.

LEPTODICTYUM RIPARIUM (Hedw.) Warnst. This is mixed with its forma *longifolium* (Schultz) Grout; from turf and sticks, edge of a wet situation.

PLAGIOTHECIUM LAETUM Bry. Eur. On rocks, rotten wood.

ORTHOTRICHUM SORDIDUM Lesq. & James. On tree trunks, ironwood and maple.

ORTHOTRICHUM SPECIOSUM Nees. On old willow log.

The writer has collected good *Orthotrichum elegans* Hook. & Grev. in New Brunswick, but this collection from Windsor seems to be closer to *O. speciosum* in its larger size and shaggier appearance. Some leaves are as long as 6 mm.

POLYTRICHUM COMMUNE Hedw. var. PERIGONIALE (Mx.) Bry. Eur. On ground, rotten logs, etc.

More common than the species in the Acadian region.

POLYTRICHUM JUNIPERINUM Hedw. var. ALPESTRE Bry. Eur. This form with the slender strict habit and shorter capsules is found around Windsor in boggy situations.

POLYTRICHUM FORMOSUM Hedw. On ground, May.

ASTOMUM MUHLENBERGIANUM (Sw.) Grout. On ground in rather sterile pasture.

PHASCUM CUSPIDATUM [Schreb.] Hedw. On ground in sterile pasture. This is typical and not the var. *americanum* Ren. & Card.

WEISIA MICROSTOMA (Hedw.) C. Müell. On ground, sterile pasture. *Weisia microstoma* when in fruit is easily separated from *Weisia viridula* Hedw.

Astomum Muhlenbergianum, *Phascum cuspidatum* and *Weisia microstoma* were found growing in association with each other, and sometimes with *Pottia truncata* (Hedw.) Furnr. These three species may have a coastal-plain distribution, at least in eastern Canada. For the writer has not as yet found them in central New Brunswick.

GRAND FALLS,
NEW BRUNSWICK

CYPRIPEDIUM CALCEOLUS L., var. **parviflorum** (Salisb.), comb. nov. *C. Calceolus*, β . in part, L. Sp. Pl. 951 (1753). *C. parviflorum* Salisb. in Trans. Linn. Soc. i. 77, t. 2, fig. 2 (1791). *C. flavescens* DC., B. *C. parviflorum* (Salisb.) DC. in Redouté, Liliaceae, i. pl. 20 (1802). *C. luteum* Raf., var. *parviflorum* (Salisb.) Raf. Med. Bot. i. 142 (1828). *C. hirsutum* Mill., var. *parviflorum* (Salisb.) Rolfe in Orchid Rev. xv. 184 (1907). *C. bulbosum* Mill., var. *parviflorum* (Salisb.) Farwell in Fifteenth Rep. Mich. Acad. Sci. 170 (1913). *Calceolus parviflorus* (Salisb.) Nieuwl. in Am. Midl. Nat. iii. 118 (1913).

The large-flowered *Cypripedium Calceolus*, var. *pubescens* (Willd.) Correll in Bot. Mus. Lfts. (Harvard), vii. 14 (1938) is relatively southern, characteristic of rich and dry to merely damp woodland from Georgia to Missouri, thence north to the Northern States, reaching its northeastern limit in central Maine. The smaller-flowered var. *parviflorum*, on the other hand, is relatively northern, extending from the southern part of the Labrador Peninsula to northern British Columbia, thence south to Newfoundland, Prince Edward Island, New Brunswick, New England, New Jersey, upland of Maryland, mountain-region to Georgia and Tennessee, Ohio, Indiana, Illinois, Missouri, New Mexico, Utah and Washington, mostly in calcareous bogs or mossy swamps or mossy woods or on wet rocks, slopes or shores. The differences between the two are clearly brought out by Mr. Albert M. Fuller in his masterly Studies on the Flora of Wisconsin I. The Orchids, Orchidaceae—Bull. Pub. Mus. Milwaukee, xiv¹. 64–70 (1933), a treatment meriting careful consideration.—M. L. FERNALD.